WHAT IS CLAIMED IS:

1. A polypeptide having the cinnamyl alcohol dehydrogenase function, selected from a group comprising (a), (b) and (c) polypeptide:

(a) polypeptide containing all portion of the amino acid sequence set forth in SEQ ID NO. 2;

(b) polypeptide containing a substantial portion of the amino acid sequence set forth in SEQ ID NO. 2;

(c) polypeptide substantially similar to the above (a) or (b) polypeptide,

wherein the cinnamyl alcohol dehydrogenase has substrate specificity for coniferyl alcohol, a substrate of backward reaction as well as coniferaldehyde, a substrate of forward reaction, and has higher substrate affinity for coniferaldehyde than coniferyl alcohol.

2. A polynucleotide encoding the polypeptide of claim 1.

3. A method for inhibiting a plant growth, which comprises a step of inhibiting the expression or function of a polypeptide that has the cinnamyl alcohol dehydrogenase function and consists of the amino acid sequence of SEQ ID NO. 2 or its equivalent sequence.

4. The method according to claim 3, in which the step is performed by introducing an anti-sense nucleotide against the polynucleotide set forth in claim 2 into a plant.

5. The method according to claim 3, in which the step is performed by introducing a recombinant vector containing an anti-sense nucleotide against the polynucleotide set forth in claim 2 into a plant.

6. The method according to claim 3, in which the step is performed by introducing a *Agrobacterium tumefaciens* transformant transformed with a recombinant vector containing an anti-sense nucleotide against the polynucleotide set forth in claim 2, into a plant.

7. The method according to claim 3, in which the step is performed by any one technique that is selected among gene deletion, gene insertion, T-DNA insertion, homologous recombination, transposon tagging, small interfering RNA (siRNA) and the like.

8. A process for screening a growth inhibitor of plants, which comprises a step for screening a substance inhibiting the expression or function of a polypeptide that has the cinnamyl alcohol dehydrogenase function and consists of the amino acid sequence of SEQ ID NO. 2 or its equivalent sequence.

9. A composition for inhibiting plant growth comprising a growth inhibitor screened by the process set forth in claim 8.

10. The composition according to claim 9, in which the inhibitor is selected from a group consisting of (1) the anti-sense nucleotide against the polynucleotide of claim 2; (2) the recombinant vector containing the anti-sense nucleotide against the polynucleotide of claim 2; and (3) the transformant of *Agrobacterium tumefaciens* transformed with the recombinant vector containing the anti-sense nucleotide against the polynucleotide of claim 2.